REMARKS/ARGUMENTS

Summary of the office action:

(1) rejected claims 19 and 67-83 under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (U.S. Patent 5,556,501) in view of DeOrnellas et al. (WO99/25568);

(2) rejected claims 19 and 67-83 under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (U.S. Patent 5,556,501) in view of Keizo (JP07-130712A);

(3) rejected claims 19, 67, 69-70, 72-78, and 80-83 under 35 U.S.C. 103(a) as being unpatentable over Imai et al. (WO97/27622) in view of DeOrnellas et al. (WO99/25568);

(4) rejected claims 68, 71, and 79 under 35 U.S.C. 103(a) as being unpatentable over Imai et al. (WO97/27622) in view of DeOrnellas et al. (WO99/25568) as applied to claims 19, 67, 69-70, 72-78, and 80-83 above, and further in view of Collins et al. (U.S. Patent 5,556,501);

(5) rejected claims 19, 67, 69-70, 72-78, and 80-83 under 35 U.S.C. 103(a) as being unpatentable over Imai et al. (WO97/27622) in view of Keizo (JP07-130712A);

(6) rejected claims 68, 71, and 79 under 35 U.S.C. 103(a) as being unpatentable over Imai et al. (WO97/27622) in view of Keizo (JP07-130712A) as applied to claims 19, 67, 69-70, 72-78, and 80-83 above, and further in view of Collins et al. (U.S. Patent 5,556,501).

Remarks/Arguments:

The present Response amends claims 19, 69 and 76, leaving for the Examiner's present consideration claims 19 and 67-83. Reconsideration of the rejections is requested.

(1) With regard to the rejection of claims 19 and 67-83 under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (U.S. Patent 5,556,501) in view of DeOrnellas et al. (WO99/25568), Applicants respectfully traverse the rejection. Applicants assert that *Collins* in view of *DeOrnellas* fails to recite all of the features of claims 19 and 67-83; therefore *Collins* in view of *DeOrnellas* cannot render claims 19 and 67-83 unpatentable under 35 U.S.C. 103(a).

In the Office Action, the Examiner writes that "Collins et al. is applied as above but **fails to expressly disclose** a platinum etch method or where oxygen and chlorine are present in the reactor and **heating the upper electrode causes deposits of oxygen and chlorine to de-absorb**

from the upper electrode in order to leave mostly platinum deposited on the surface...DeOrnellas et al. discloses a similar three electrode configuration...where platinum or other materials are etched in a chlorine gas and oxygen is inherently present in the chamber (see page 8, line 25 to page 9, line 17). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Collins et al. so as to performing the platinum etching process of DeOrnellas et al. because this would be a suitable method, for example, to reduce the platinum deposits that can form on the wafer." (Emphasis added). See OA, page 3.

As noted by the Examiner, *Collins* fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19. Applicants assert that *DeOrnellas* fails to remedy this deficiency. Applicants respectfully argue that nowhere does *DeOrnellas* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19.

Metal etch, and specifically platinum etch processing as taught in *DeOrnellas* does not inherently teach heating of the upper electrode. Referring to page 3, lines 20-25, for example, *DeOrnellas* *does* teach "minimizing the critical dimension growth of a feature located on a wafer during an etch process including the steps of placing a wafer on a chuck in an etch reactor and controlling the heat transfer from the wafer in order to allow the temperature of the wafer to climb **in order to minimize critical dimension growth of the feature on the wafer**" (Emphasis added). The process of *DeOrnellas* uses temperature control of the wafer to minimize critical dimensions, while the present invention, conversely, uses temperature control of the upper electrode to produce a stable film on the upper electrode. The two inventions have different objectives. Minimizing critical dimension growth is beneficial for shrinking feature size, while producing a stable film on the upper electrode is beneficial for reducing defects attributable to flaking and/or spaulding. The two objectives are mutually exclusive. As suggested in MPEP 2144.01, "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). However, because *DeOrnellas* employs a completely different technique (heating the wafer) to achieve a different objective (minimizing feature size), there can be no inference which one skilled in the art would reasonably be expected to draw that "heating the upper

electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in claim 19 would produce a desirable result. Based on the reasoning provided in *DeOrnellas*, there is no logical connection between heating the upper electrode and minimizing feature size. In fact, minimizing feature size tends to increase defects or the potential for defects by shrinking the particle size which can damage features, thereby effectively increasing the number of potentially damaging particles exposed to the wafer.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Nowhere does *Collins* in view of *DeOrnellas* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of oxygen and chlorine to de-absorb from the upper electrode" as recited in amended claim 19. Because not all of the recited claim limitations are taught or suggested by the cited art, to sustain the rejection under 35 U.S.C. 103(a) the Examiner must make official notice that such deficiencies are remedied by being well known in the art ("The rationale supporting an obviousness rejection may be based on common knowledge in the art or 'well-known' prior art. The examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being 'well-known' in the art. *In re Ahlert,* 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970)." MPEP 2144.03).

Applicants assert that because *Collins* in view of *DeOrnellas* fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of oxygen and chlorine to de-absorb from the upper electrode" as recited in amended claim 19, *Collins* in view of *DeOrnellas* cannot render claim 19 obvious under 35 U.S.C. 103(a).

For the same reasons, *Collins* in view of *DeOrnellas* fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of mostly platinum on the surface of the upper electrode wherein said deposits of mostly platinum forms a stable layer of material wherein the layer of material formed on the upper electrode is more stable than a layer of

material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly platinum on the surface of the upper electrode" as recited in claim 69, and therefore cannot render amended claim 69 obvious under 35 U.S.C. 103(a).

For the same reasons, *Collins* in view of *DeOrnellas* fails to teach or suggest "heating the upper electrode with said heater to a temperature such that deposits of mostly the non-volatile film accumulate on the surface of the upper electrode wherein said deposits of mostly non-volatile film forms a layer of material; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly non-volatile film to accumulate on the surface of the upper electrode" as recited in claim 76, and therefore cannot render amended claim 76 obvious under 35 U.S.C. 103(a).

Dependent claims have at least the features of the independent claims from which they depend. Therefore, claims 67 and 68 (which depend from claim 19), 70-75 (which ultimately depend from claim 69), and 77-83 (which ultimately depend from claim 76) cannot be rendered unpatentable by *Collins* in view of *DeOrnellas* under 35 U.S.C. 103(a).

(2) With regard to the rejection of claims 19 and 67-83 under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (U.S. Patent 5,556,501) in view of Keizo (JP07-130712A), Applicants respectfully traverse the rejection. Applicants assert that Collins in view of Keizo fails to recite all of the features of claims 19 and 67-83; therefore Collins in view of Keizo cannot render claims 19 and 67-83 unpatentable under 35 U.S.C. 103(a).

As stated above in (1), the Examiner noted that Collins fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19. Applicants assert that Keizo fails to remedy this deficiency. Applicants respectfully argue that nowhere does DeOrnellas teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19.

In the Office Action, the Examiner writes "Keizo discloses performing plasma etching of platinum using a chloride containing gas (see abstract). Furthermore, note that inherently oxygen will be present in the chamber. In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Collins et al.

so as to performing the platinum etching process of Keizo et al. because this would be a suitable method, for example, to reduce the platinum deposits that can form on the wafer." See OA, page 5.

Again, as above with *DeOrnellas*, metal etch, and specifically platinum etch processing as taught in *Keizo* does not inherently teach heating of the upper electrode. Referring to the abstract, for example, *Keizo* <u>does</u> teach "mak(ing) it possible to form an almost vertical side wall…without contamination reattached on the side wall in a treatment step, by etching a Pt-based allow on a workpiece in chloride-based gas plasma while the workpiece is heated at least to 350 C or above." *Keizo* appears to propose reducing contaminants on the sidewalls of features on a workpiece (it's not clear from the abstract how the treatment step typically causes attachment of contaminants to the sidewall). To reduce contaminants that reattach during the treatment step, *Keizo* proposes heating a workpiece (i.e. wafer) to 350 C or above, and NOT by heating the upper electrode. Based on the Abstract, *Keizo* proposes reduces contaminants on sidewalls of features of a wafer. In contrast, the present invention uses temperature control of the upper electrode to produce a stable film on the upper electrode, thereby preventing flaking and spaulding of material from the upper electrode, such flaking and spaulding potentially causing large particulate counts **<u>indiscriminately</u>** falling onto the wafer. As with *DeOrnellas*, the two inventions have different objectives. *Keizo* seeks to reduce reattachment of polymer on feature sidewalls, while the present invention seeks to produce a stable film on the upper electrode for the benefit of reducing defects attributable to flaking and/or spaulding. The two objectives are mutually exclusive. As suggested in MPEP 2144.01, "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). However, because *Keizo* employs a completely different technique (heating the wafer) to achieve a different objective (reducing polymer on the individual features), there can be no inference which one skilled in the art would reasonably be expected to draw that "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19 would produce a desirable result.

Nowhere does *Collins* in view of *Keizo* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed

when heating the upper electrode with said heater to a temperature insufficient to cause deposits of oxygen and chlorine to de-absorb from the upper electrode" as recited in amended claim 19. Because not all of the recited claim limitations are taught or suggested by the cited art, to sustain the rejection under 35 U.S.C. 103(a) the Examiner must make official notice that such deficiencies are remedied by being well known in the art. Therefore, *Collins* in view of *Keizo* cannot render claim 19 obvious under 35 U.S.C. 103(a).

For the same reasons, *Collins* in view of *Keizo* fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of mostly platinum on the surface of the upper electrode wherein said deposits of mostly platinum forms a stable layer of material wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly platinum on the surface of the upper electrode" as recited in claim 69, and therefore cannot render amended claim 69 obvious under 35 U.S.C. 103(a).

For the same reasons, *Collins* in view of *Keizo* fails to teach or suggest "heating the upper electrode with said heater to a temperature such that deposits of mostly the non-volatile film accumulate on the surface of the upper electrode wherein said deposits of mostly non-volatile film forms a layer of material; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly non-volatile film to accumulate on the surface of the upper electrode" as recited in claim 76, and therefore cannot render amended claim 76 obvious under 35 U.S.C. 103(a).

Dependent claims have at least the features of the independent claims from which they depend. Therefore, claims 67 and 68 (which depend from claim 19), 70-75 (which ultimately depend from claim 69), and 77-83 (which ultimately depend from claim 76) cannot be rendered unpatentable by *Collins* in view of *Keizo* under 35 U.S.C. 103(a).

(3) With regard to the rejection of claims 19, 67, 69-70, 72-78, and 80-83 under 35 U.S.C. 103(a) as being unpatentable over Imai et al. (WO97/27622) in view of DeOrnellas et al. (WO99/25568), Applicants respectfully traverse the rejection. Applicants assert that *Imai* in view of *DeOrnellas* fails to recite all of the features of claims 19, 67, 69-70, 72-78; therefore *Imai* in view of *DeOrnellas* cannot render claims 19, 67, 69-70, 72-78 unpatentable under 35 U.S.C. 103(a).

In the Office Action, the Examiner writes that *Imai* "fails to expressly disclose a platinum or nonvolatile etch method where oxygen and chlorine are present in the reactor and heating the

upper electrode causes deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the surface. DeOrnellas et al. discloses where platinum or other materials are etched in a chlorine gas and oxygen is inherently present in the chamber (see page 8, line 25 to page 9, line 17). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Imai et al. so as to perform the platinum etching process of DeOrnellas et al. because this would be a suitable method, for example, to reduce the platinum deposits that can form on the wafer." See OA, page 9.

As noted by the Examiner, *Imai* fails to teach or suggest "disclose a platinum or non-volatile etch method where oxygen and chlorine are present in the reactor and heating the upper electrode causes deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the surface.". Applicants assert that *DeOrnellas* fails to remedy this deficiency. Applicants respectfully argue that nowhere does *DeOrnellas* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19.

As stated above in (1), platinum etch processing as taught in *DeOrnellas* does not inherently teach heating of the upper electrode. The process of *DeOrnellas* uses temperature control of the wafer to minimize critical dimensions, while the present invention, conversely, uses temperature control of the upper electrode to produce a stable film on the upper electrode. The two inventions have different objectives. Minimizing critical dimension growth is beneficial for shrinking feature size, while producing a stable film on the upper electrode is beneficial for reducing defects attributable to flaking and/or spaulding. The two objectives are mutually exclusive. Because *DeOrnellas* employs a completely different technique (heating the wafer) to achieve a different objective (minimizing feature size), there can be no inference which one skilled in the art would reasonably be expected to draw that "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in claim 19 would produce a desirable result. Based on the reasoning provided in *DeOrnellas*, there is no logical connection between heating the upper electrode and minimizing feature size. In fact, minimizing feature size tends to <u>increase</u> defects or the potential for defects by shrinking the particle size which can damage features, thereby effectively increasing the number of potentially damaging particles exposed to the wafer.

Nowhere does *Imai* in view of *DeOrnellas* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of oxygen and chlorine to de-absorb from the upper electrode" as recited in amended claim 19. Because not all of the recited claim limitations are taught or suggested by the cited art, to sustain the rejection under 35 U.S.C. 103(a) the Examiner must make official notice that such deficiencies are remedied by being well known in the art. Applicants assert that because *Imai* in view of *DeOrnellas* fails to teach or suggest all of the limitations of amended claim 19, *Imai* in view of *DeOrnellas* cannot render claim 19 obvious under 35 U.S.C. 103(a).

For the same reasons, *Imai* in view of *DeOrnellas* fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of mostly platinum on the surface of the upper electrode wherein said deposits of mostly platinum forms a stable layer of material wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly platinum on the surface of the upper electrode" as recited in claim 69, and therefore cannot render amended claim 69 obvious under 35 U.S.C. 103(a).

For the same reasons, *Imai* in view of *DeOrnellas* fails to teach or suggest "heating the upper electrode with said heater to a temperature such that deposits of mostly the non-volatile film accumulate on the surface of the upper electrode wherein said deposits of mostly non-volatile film forms a layer of material; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly non-volatile film to accumulate on the surface of the upper electrode" as recited in claim 76, and therefore cannot render amended claim 76 obvious under 35 U.S.C. 103(a).

Dependent claims have at least the features of the independent claims from which they depend. Therefore, claims 67 (which depend from claim 19), 70, 72-75 (which ultimately depend from claim 69), and 77, 78, 80-83 (which ultimately depend from claim 76) cannot be rendered unpatentable by *Imai* in view of *DeOrnellas* under 35 U.S.C. 103(a).

(4) With regard to the rejection of claims 68, 71 and 79 under 35 U.S.C. 103(a) as being unpatentable over *Imai* in view of *DeOrnellas* in further view of *Collins*, Applicants respectfully traverse the rejection. Applicants assert that *Imai* in view of *DeOrnellas* in further view of

Collins fails to recite all of the features of claims 68, 71 and 79; therefore *Imai* in view of *DeOrnellas* in further view of *Collins* cannot render claims 68, 71 and 79 unpatentable under 35 U.S.C. 103(a).

For the reasons given above in Section (3) *Imai* in view of *DeOrnellas* fails to teach or suggest all of the limitations of claims 19, 69 and 76. For the reasons given above in Section (1), *Collins* fails to remedy this deficiency. Dependent claims have at least the features of the independent claims from which they depend. Therefore, claims 68 (which depend from claim 19), 71 (which ultimately depend from claim 69), and 79 (which ultimately depend from claim 76) cannot be rendered unpatentable by *Imai* in view of *DeOrnellas* in further view of *Collins* under 35 U.S.C. 103(a).

(5) With regard to the rejection of claims 19, 67, 69-70, 72-78, and 80-83 under 35 U.S.C. 103(a) as being unpatentable over *Imai* in view of *Keizo*, Applicants respectfully traverse the rejection. Applicants assert that *Imai* in view of *Keizo* fails to recite all of the features of claims 19, 67, 69-70, 72-78, and 80-83; therefore *Imai* in view of *Keizo* cannot render claims 19, 67, 69-70, 72-78, and 80-83 unpatentable under 35 U.S.C. 103(a).

As noted by the Examiner, *Imai* fails to teach or suggest "disclose a platinum or non-volatile etch method where oxygen and chlorine are present in the reactor and heating the upper electrode causes deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the surface." Applicants assert that *Keizo* fails to remedy this deficiency. Applicants respectfully argue that nowhere does *Keizo* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19.

Again, as argued in Section (2), platinum etch processing as taught in *Keizo* does not inherently teach heating of the upper electrode. Referring to the abstract, for example, *Keizo* <u>*does*</u> teach "mak(ing) it possible to form an almost vertical side wall…without contamination reattached on the side wall in a treatment step, by etching a Pt-based allow on a workpiece in chloride-based gas plasma while the workpiece is heated at least to 350 C or above." *Keizo* appears to propose reducing contaminants on the sidewalls of features on a workpiece (it's not clear from the abstract how the treatment step typically causes attachment of contaminants to the sidewall). To reduce contaminants that reattach during the treatment step, *Keizo* proposes heating a workpiece (i.e. wafer) to 350 C or above, and NOT by heating the upper electrode. Based on the Abstract, *Keizo* proposes reduces contaminants on sidewalls of features of a wafer. In

contrast, the present invention uses temperature control of the upper electrode to produce a stable film on the upper electrode, thereby preventing flaking and spaulding of material from the upper electrode, such flaking and spaulding potentially causing large particulate counts **indiscriminately** falling onto the wafer. As with *DeOrnellas*, the two inventions have different objectives. *Keizo* seeks to reduce reattachment of polymer on feature sidewalls, while the present invention seeks to produce a stable film on the upper electrode for the benefit of reducing defects attributable to flaking and/or spaulding. The two objectives are mutually exclusive. Because *Keizo* employs a completely different technique (heating the wafer) to achieve a different objective (reducing polymer on the individual features), there can be no inference which one skilled in the art would reasonably be expected to draw that "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode" as recited in previously presented claim 19 would produce a desirable result.

Nowhere does *Imai* in view of *Keizo* teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of oxygen and chlorine to de-absorb from the upper electrode in order to leave mostly platinum deposited on the electrode; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of oxygen and chlorine to de-absorb from the upper electrode" as recited in amended claim 19. Therefore, *Imai* in view of *Keizo* cannot render claim 19 obvious under 35 U.S.C. 103(a).

For the same reasons, *Imai* in view of *Keizo* fails to teach or suggest "heating the upper electrode with said heater to a temperature in order to cause deposits of mostly platinum on the surface of the upper electrode wherein said deposits of mostly platinum forms a stable layer of material wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly platinum on the surface of the upper electrode" as recited in claim 69, and therefore cannot render amended claim 69 obvious under 35 U.S.C. 103(a).

For the same reasons, *Imai* in view of *Keizo* fails to teach or suggest "heating the upper electrode with said heater to a temperature such that deposits of mostly the non-volatile film accumulate on the surface of the upper electrode wherein said deposits of mostly non-volatile film forms a layer of material; wherein the layer of material formed on the upper electrode is more stable than a layer of material formed when heating the upper electrode with said heater to a temperature insufficient to cause deposits of mostly non-volatile film to accumulate on the surface of the upper electrode" as recited in claim 76, and therefore cannot render amended claim

76 obvious under 35 U.S.C. 103(a).

Dependent claims have at least the features of the independent claims from which they depend. Therefore, claims 67 (which depends from claim 19), 70, 72-75 (which ultimately depend from claim 69), and 77, 78, 80-83 (which ultimately depend from claim 76) cannot be rendered unpatentable by *Imai* in view of *Keizo* under 35 U.S.C. 103(a).

(6) With regard to the rejection of claims 68, 71 and 79 under 35 U.S.C. 103(a) as being unpatentable over *Imai* in view of *Keizo* in further view of *Collins*, Applicants respectfully traverse the rejection. Applicants assert that *Imai* in view of *Keizo* in further view of *Collins* fails to recite all of the features of claims 68, 71 and 79; therefore *Imai* in view of *Keizo* in further view of *Collins* cannot render claims 68, 71 and 79 unpatentable under 35 U.S.C. 103(a).

For the reasons given above in Section (5) *Imai* in view of *Keizo* fails to teach or suggest all of the limitations of claims 19, 69 and 76. For the reasons given above in Section (1), *Collins* fails to remedy this deficiency. Dependent claims have at least the features of the independent claims from which they depend. Therefore, claims 68 (which depend from claim 19), 71 (which ultimately depend from claim 69), and 79 (which ultimately depend from claim 76) cannot be rendered unpatentable by *Imai* in view of *Keizo* in further view of *Collins* under 35 U.S.C. 103(a).

Conclusion

Applicant respectfully requests that a Notice of Allowance be issued in this case.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: 11/03/06

By: /Michael L. Robbins/
Michael L. Robbins
Reg. No. 54,774

FLIESLER MEYER LLP
Four Embarcadero Center, Fourth Floor
San Francisco, California 94111-4156
Telephone: (415) 362-3800